

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

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E1
D1

1 20. (Currently Amended) A method comprising:
2 issuing an instruction, wherein said instruction includes a hint field, a base
3 field and an offset field;
4 forming an address to access data in a cache, wherein said address is
5 formed by using information contained in said offset and base fields; and
6 prefetching said data, when unavailable in said cache, in accordance with
7 hint information contained in said hint field, wherein said hint information indicates
8 an expected use of said data and specifies a destination for said data, and said hint
9 information is independent of said address.

1 21. (Original) The method of claim 20 wherein said address is a
2 virtual address.

1 22. (Original) The method of claim 20 wherein said hint information
2 indicates said data is expected to be not reused extensively and directs said data to a
3 certain way destination in said cache.

1 23. (Original) The method of claim 20 wherein said hint information
2 indicates said data is expected to be reused extensively and directs said data to a certain
3 way destination in said cache.

1 24. (Original) The method of claim 20 wherein said hint information
2 directs said data to (a) a first way destination when said data is expected to be not reused
3 extensively, and (b) a second way destination when said data is expected to be reused
4 extensively.

1 25. (Original) The method of claim 20 wherein said hint information
2 directs said data to (a) a first way destination when said data is expected to be loaded but

3 not reused extensively or said data is expected to be stored or modified but not reused
4 extensively, and (b) a second way destination when said data is expected to be loaded and
5 reused extensively or said data is expected to be stored or modified and reused
6 extensively.

D1
1 26. (Currently Amended) A method comprising:
2 issuing an instruction, wherein said instruction includes a hint field, a base
3 field and an index field;
4 forming an address to access data in a cache, wherein said address is
5 formed by using information contained in said index and base fields; and
6 prefetching said data, when unavailable in said cache, in accordance with
7 hint information contained in said hint field, wherein said hint information indicates
8 an expected use of said data and specifies a destination for said data, and said hint
9 information is independent of said address.

1 27. (Original) The method of claim 26 wherein said address is a
2 virtual address.

1 28. (Original) The method of claim 26 wherein said hint information
2 indicates said data is expected to be not reused extensively and directs said data to a
3 certain way destination in said cache.

1 29. (Original) The method of claim 26 wherein said hint information
2 indicates said data is expected to be reused extensively and directs said data to a certain
3 way destination in said cache.

1 30. (Original) The method of claim 26 wherein said hint information
2 directs said data to (a) a first way destination when said data is expected to be not reused
3 extensively, and (b) a second way destination when said data is expected to be reused
4 extensively.

D1 1 31. (Original) The method of claim 26 wherein said hint information
2 directs said data to (a) a first way destination when said data is expected to be loaded but
3 not reused extensively or said data is expected to be stored or modified but not reused
4 extensively, and (b) a second way destination when data is expected to be loaded and
5 reused extensively or said data is expected to be stored or modified and reused
6 extensively.
